MODULE 3
STORAGE AND PROCESSING IN CONTAINERS

3.A. APPLICABILITY

The requirements of this module apply to the operation of hazardous waste container storage and processing areas at the facility. For purposes of this permit, the Thaw Unit – Unit 105; the Rail/Truck Transfer Bay located within Unit 535; the Truck Wash Bay located in Unit 604; and the Containerized Bulk Solids Storage Unit – Unit 106 are hazardous waste container storage and processing areas. The Railcar to Trailer Transload Building - Unit 255, is not a permitted storage area, but is utilized as a transfer facility in accordance with the requirements in R315-6-1.12. The Permittee shall comply with all requirements established in this permit when storing and/or processing any wastes in these areas.

3.B. STORAGE CAPACITY

3.B.1. The Permittee may store wastes, as outlined in this module, in the container storage and processing areas specified below, up to the capacities listed. Storage of wastes in containers in any other area is prohibited. For purposes of determining compliance with the capacity limitations, all containers shall be considered to be full to their respective capacities.

a. Thaw Unit (Unit 105) – 60,000 gallons
b. Rail/Truck Transfer Bay (Unit 535) – 23,560 gallons
c. Truck Wash Bay (Unit 604) and Containerized Bulk Storage Unit (Unit 106) – Combined Capacity – 1,847,871 gallons; Subunit 1 – 448,440 gallons in the enclosed area, 181,800 gallons in the unenclosed area; Subunit 2 – 617,463 gallons; Subunit 3 – 600,168 gallons. No more than four 30-yd^3 roll-offs may be stored in Unit 604 at the same time.

3.B.2. The Permittee may process wastes in containers in the container storage and processing areas identified below. The processing is limited to waste transfer between containers and the addition of absorbent material to containerized waste. Any other treatment or processing of waste in containers or in the container management areas, including active mixing of absorbent added to a container of waste, is prohibited.

a. Thaw Unit (Unit 105)
b. Rail/Truck Transfer Bay (Unit 535)
c. Truck Wash Bay (Unit 604)
d. Containerized Bulk Solids Storage Unit (Unit 106) – Subunits 1, 2 and 3

3.C. PERMITTED AND PROHIBITED WASTES

The Permittee may store and process in the container storage areas, the wastes identified in Condition 2.C.1., unless prohibited in Condition 2.C.2.

3.D. OPERATION AND MAINTENANCE

3.D.1. The Permittee shall maintain the container storage and processing areas and associated secondary containment systems as constructed and in accordance with the drawings contained in Attachment 9.

3.D.2. Modifications to the drawings for the container management areas and associated secondary containment systems are allowed only in accordance with the permit modification requirements in Condition 1.D.

3.D.3. The Permittee shall not proceed with construction or installation of a new or modified container management area or secondary containment system without the approval of the Executive Secretary unless construction is allowed as outlined in Condition 1.D.

3.D.4. The Permittee shall maintain the container storage and processing areas and any ancillary equipment and secondary containment systems in good repair. Routine maintenance shall be performed at sufficient frequency to ensure that the container storage and processing areas and any ancillary equipment and secondary containment systems remain in good repair. Malfunctions and deterioration shall be corrected as expeditiously as possible.

3.D.5. The container storage and processing areas and associated secondary containment systems shall be designed, constructed, maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden discharge of hazardous waste or hazardous waste constituents to the air, soil, groundwater, surface water or any other location which could threaten human health or the environment.

3.D.6. The Permittee shall comply with the provisions specified in Attachment 8, Container Management.

3.E. OPERATING REQUIREMENTS

3.E.1. If a container holding hazardous waste is not in good condition (e.g., severe rusting, bulging, apparent structural defects) or it begins to leak, the Permittee shall transfer the hazardous waste from such container, or the container of hazardous waste itself, to a DOT acceptable container, as soon as possible, but no later than 24 hours from the time the problem was first discovered. If the damaged or leaking container is a large container (e.g., roll-off), instead of

transferring the waste to another container or repackaging the leaking container within 24 hours, the following option may be followed:

3.E.1.a. If the large container is subject to subpart CC, the Permittee shall attempt an initial repair within 24 hours of discovery of the leak. If repair efforts are unsuccessful at stopping the leak, the container shall be placed in Unit 604 within 24 hours of discovery of the leak and the leak repaired within five calendar days of discovery. If the leak cannot be repaired within five days of discovery, the contents of the container must be transferred to a container in good condition after which the waste can resume normal management at the facility. The date and time of leak detection, repair efforts, and container movements shall be documented in the operating record.

3.E.1.b. If the large container is not subject to subpart CC, the Permittee shall attempt an initial repair within 24 hours of discovery of the leak. If repair efforts are unsuccessful at stopping the leak, the container shall be placed in an enclosed storage location at the facility within 24 hours of discovery of the leak and the leak repaired within ten calendar days of discovery. If the leak cannot be repaired within ten days of discovery, the contents of the container must be transferred to a container in good condition after which the waste can resume normal management at the facility. The date and time of leak detection, repair efforts, and container movements shall be documented in the operating record.

3.E.2. The Permittee shall assure that wastes or other materials in containers are compatible with the containers. Containers must be made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste stored in them, so that the ability of the containers to contain the waste is not impaired.

3.E.3. The Permittee shall not place incompatible waste or materials in the same container.

3.E.4. The Permittee shall not place hazardous waste or materials in an unwashed container that previously held an incompatible waste or material.

3.E.5. A container holding a waste that is incompatible with any waste or other material shall be separated from the other waste or materials by placing it an alternative storage location in accordance with Attachment 8.

3.E.6. Containers shall always be closed except when the Permittee is adding or removing wastes or adding absorbent, as allowed by this permit, to or from the containers.

3.E.7. Containers shall not be opened, handled, stored, or managed in a manner which may rupture the containers or cause them to leak.

3.E.8. Within ten days of arrival at the Northeast Casualty Real Property Clive facility, the Permittee shall accept and place all hazardous waste into permitted container storage at Clive or ship the waste off-site to another facility. Arrival for purposes of this condition is the day the waste enters the gate of the Clive facility.

3.E.9. The Permittee shall maintain sufficient aisle space in the container storage and processing areas to allow the unobstructed movement of personnel, fire protection equipment, discharge control equipment, and decontamination equipment to all areas of the container storage and processing areas. Sufficient aisle space shall be maintained such that access can be made to each container to check for leaks, container damage or deterioration, and also to view the label.

3.E.10. The Permittee shall not locate containers holding ignitable or reactive waste, within 50 feet of the facility's property line.

3.E.11. No smoking shall be allowed within 50 feet of any of the container management areas. The Permittee shall take precautions to prevent accidental ignition or reaction of waste. The waste shall be separated and protected from sources of ignition or reaction including, but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. Such sources of ignition shall be allowed only after adequate additional precautions have been taken to prevent ignition of wastes or other materials and a hot work permit has been issued.

3.E.12. The Permittee shall maintain a record of the location of each container in the container storage and processing areas. This record shall be updated prior to the end of the shift and shall document all containers and their locations. A history of the movement of each container of waste will be maintained from the time it is placed into one of the permitted container management areas until it is manifested off-site. The Permittee shall comply with the waste tracking provisions of Attachment 8.

3.E.13. Small containers of hazardous waste (i.e., those having a capacity of 120 gallons or less) shall not be stored in Unit 604, Unit 106, subunits 2 and 3, or in the unenclosed portion of subunit 1, Unit 106.

3.F. CONTAINMENT

3.F.1 The secondary containment systems shall be operated and maintained such that they are free of both cracks and gaps and are sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.

3.F.2. When the facility is staffed, the Permittee shall empty all liquid and remove accumulated waste from a sump or secondary containment area no later than 24

hours after discovering the contents. All liquids and other materials collected from a sump or secondary containment area shall be considered a hazardous waste and shall be managed appropriately.

3.F.3. Containment for 10% of the maximum capacity or the volume of the largest container, whichever is greater, shall be maintained for each container storage and processing area identified in Condition 3.B.1.

3.G. ORGANIC AIR EMISSION STANDARDS

3.G.1. The Permittee shall control air emissions from each of the containers of hazardous waste stored in the container storage and processing units in accordance with the applicable provisions of R315-8-22 (specifically 40 CFR 264.1082 and 264.1086).

3.G.2. The requirements contained in Condition 3.G. do not apply to a container that has a design capacity less than or equal to 0.1 m^3 (about 26 gallons).

3.G.3. A container is exempt from the standards specified in this condition provided that the container is one of the following:

3.G.3.a. A container for which all hazardous waste in the container has an average volatile organic (VO) concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in R315-8-22 (specifically 40 CFR 264.1083(a)). The Permittee shall review and update, as necessary, this VO determination at least once every 12 months following the date of the initial determination for each type of waste managed in containers at the facility. The initial review shall be conducted within 30 days of the effective date of this Permit. The reviews shall be documented in the Operating Record.

3.G.3.b. A container for which the organic content of all hazardous waste in the container has been reduced by an organic destruction method or removal process that achieves any one of the conditions contained in R315-8-22 (specifically 40 CFR 264.1082(c)(2)). For these wastes, the necessary determinations to demonstrate organic destruction or removal shall be made using the applicable procedures specified in R315-8-22 (specifically 40 CFR 264.1083(b)).

3.G.3.c. A container for which all hazardous waste in the container either: meets the numerical concentration limits for organic constituents, applicable to the hazardous waste, as specified in R315-13-1 (LDR Treatment Standards), or the organic hazardous constituents in the waste have been treated by the treatment technology established by the EPA for the waste in R315-13-1 (LDR Treatment Technology Standards), or have been removed or destroyed by an equivalent method of treatment approved by the Executive Secretary pursuant to R315-13-1.

3.G.4. The Executive Secretary may at any time perform or request that the Permittee perform an average VO concentration determination of a hazardous waste managed in a container exempted from using air emission controls under the provisions of R315-8-22 (specifically 40 CFR 264.1082(d)).

3.G.5. For containers of hazardous waste in the container storage and processing units having a design capacity greater than 0.1 m^3 (about 26 gallons) and less than or equal to 0.46 m^3 (about 119 gallons), the Permittee shall control air pollutant emissions from the containers in accordance with Level 1 standards.

3.G.5.a. Containers using Level 1 controls shall be one of the following:

3.G.5.a.i. A container that meets the applicable U.S. DOT regulations on packaging hazardous materials for transportation as specified in 40 CFR 264.1086(f).

3.G.5.a.ii. A container that is equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position, there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container, or may be an integral part of the container structural design.

3.G.5.a.iii. An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere.

3.G.5.b. A container complying with Level 1 controls shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere, and to maintain the equipment integrity for as long as the container is in service.

3.G.5.c. Whenever a hazardous waste is in a container using Level 1 controls, the Permittee shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position, except as follows:

3.G.5.c.i. Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material as follows:

3.G.5.c.i.A. When filling the container to the intended final level in one continuous operation, the Permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

3.G.5.c.i.B. When filling the container with discrete quantities or batches of material intermittently over a period of time, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the

container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

3.G.5.c.ii. Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

3.G.5.c.ii.A. Opening of the closure device or cover shall be allowed at any time if the container is empty as defined in R315-2-7.

3.G.5.c.ii.B. If discrete quantities or batches of material are removed from the container but the container does not meet the definition of an empty container, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes, or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

3.G.5.c.iii. Opening of a cover or closure device is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

3.G.5.c.iv. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere, is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position.

3.G.5.c.v. Opening of a safety device, as defined in R315-8-22 (specifically 40 CFR 265.1081), shall be allowed at any time conditions require doing so to avoid an unsafe condition.

3.G.5.d. The Permittee shall inspect containers subject to Level 1 controls and their covers and closure devices as follows:

3.G.5.d.i. In the case when a hazardous waste is already in the container at the time the Permittee first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, the Permittee shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

If a defect is detected, the Permittee shall make first attempts at repair no later than 24 hours after detection and the repair shall be completed as soon as possible, but not later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

3.G.5.d.ii. In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the Permittee shall visually inspect the container and its cover and closure devices initially and thereafter, at least every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the Permittee shall make first attempts at repair no later than 24 hours after detection and the repair shall be completed as soon as possible, but not later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

3.G.6. For containers of hazardous waste at the container storage and processing units having a design capacity greater than 0.46 m^3 (about 119 gallons) that are not in light material service (see definition in 40 CFR 265.1081), the Permittee shall control air pollutant emissions from the containers in accordance with Level 1 standards identified in this module.

3.G.7. For containers of hazardous waste at the container storage and processing units having a design capacity greater than 0.46 m^3 (about 119 gallons) that are in light material service (see definition in 40 CFR 265.1081), the Permittee shall control air pollutant emissions from the containers in accordance with Level 2 standards.

3.G.7.a. Containers using Level 2 controls shall be one of the following:

3.G.7.a.i. A container that meets the applicable U.S. DOT regulations on packaging hazardous materials for transportation as specified in 40 CFR 264.1086(f).

3.G.7.a.ii. A container that operates with no detectable organic emissions as defined in 40 CFR 265.1081 and determined in accordance with the procedure specified in 40 CFR 264.1086(g).

3.G.7.a.iii. A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, Appendix A, Method 27 in accordance with the procedure specified in 40 CFR 264.1086(h).

3.G.7.b. Transfer of hazardous waste in or out of a container using Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling

flammable, ignitable, reactive, or other hazardous materials. Examples of waste transfer procedures that are considered to meet the requirements of this condition include: A submerged-fill pipe or other submerged-fill method to load liquids into a container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

3.G.7.c. Whenever a hazardous waste is in a container using Level 2 controls, the Permittee shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position, except as follows:

3.G.7.c.i. Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

3.G.7.c.i.A. When filling the container to the intended final level in one continuous operation, the Permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

3.G.7.c.i.B. When filling the container with discrete quantities or batches of material intermittently over a period of time, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

3.G.7.c.ii. Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

3.G.7.c.ii.A. Opening of the closure device or cover shall be allowed at any time if the container is empty as defined in R315-2-7.

3.G.7.c.ii.B. If discrete quantities or batches of material are removed from the container but the container does not meet the definition of an empty container, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

3.G.7.c.iii. Opening of a cover or closure device is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste.

Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

3.G.7.c.iv. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position.

3.G.7.c.v. Opening of a safety device, as defined in R315-8-22 (specifically 40 CFR 265.1081), shall be allowed at any time conditions require doing so to avoid an unsafe condition.

3.G.7.d. The Permittee shall inspect containers subject to Level 2 controls and their covers and closure devices as follows:

3.G.7.d.i. In the case when a hazardous waste is already in the container at the time the Permittee first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, the Permittee shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the Permittee shall make first attempts at repair no later than 24 hours after detection and the repair shall be completed as soon as possible, but not later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired**.**

3.G.7.d.ii. In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the Permittee shall visually inspect the container and its cover and closure devices initially and thereafter, at least every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the Permittee shall make first attempts at repair no later than 24 hours after detection and the repair shall be completed as soon as possible, but not later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

3.G.8. The Permittee shall comply with the applicable recordkeeping and reporting requirements contained in R315-8-22 (specifically 40 CFR 264.1089 and 264.1090).

3.H. UNIT 106 SUSPENDED SUBUNIT OPERATIONS

3.H.1. At the Permittee's option, active waste management operations at one or two subunits in Unit 106 may cease and associated permit requirements for the subunit(s), including inspections, precipitation removal and management as a hazardous waste and maintaining financial assurance coverage, may be suspended provided the Permittee complies with the procedures outlined below:

3.H.1.a. The Permittee shall submit a Class 1 modification request requiring approval from the Executive Secretary. The modification request shall identify the subunit(s) to be suspended from active operations and outline a tentative schedule for waste removal, subunit decontamination and confirmatory sampling. The Permittee may proceed with decontamination activities provided timely notification is provided to the Executive Secretary regarding decontamination activities.

3.H.1.b. The Permittee shall decontaminate the subunit proposed for deactivation as outlined in Section 1.9 of Attachment 7.

3.H.1.c. The Permittee shall submit to the Executive Secretary, the analytical results and supporting documentation demonstrating that the decontamination standard has been achieved for the subunit seeking deactivation.

3.H.1.d. Upon demonstrating to the Executive Secretary that a subunit has achieved the decontamination standard outlined above, the Executive Secretary, as formal action on the Class 1 modification request requiring prior agency approval, will change the status of the subunit(s) from active to suspended. The necessary changes to the permit will be made and notification of this decision will be provided to the Permittee in writing. This change in status of a subunit is not effective until the Permittee receives notification of the decision in writing. Modified permit conditions shall not be implemented and financial assurance for closure of the affected subunit(s) shall be maintained until the Permittee receives notice of the change in status from active to suspended for the subunit(s).

3.H.2. To reactivate a previously suspended subunit, the Permittee shall submit a Class 1 modification request requiring approval from the Executive Secretary. The modification request shall identify proposed permit changes, including an updated closure cost estimate, necessary to reactive the subunit. The necessary changes to the permit will be made and notification of the decision on the modification request to reactivate a subunit will be provided to the Permittee in writing. Active waste management on a previously suspended subunit may not begin until the Permittee receives written notice of the change in status.

3.H.3. The Permittee may suspend active waste management operations for up to two subunits. If the Permittee wishes to suspend operations at all three subunits, the applicable closure requirements of Condition 2.M. and Attachment 7 apply.

3.H.4. The current status of the Unit 106 subunits is as follows:

Subunit 1 – Active
Subunit 2 – Suspended
Subunit 3 – Active